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Keiichi Iwamura

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EXAMINER

KANE, CORDELIA P

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed June 23, 2008 have been fully considered but they are not persuasive. Applicant argues that Smith fails to teach modification information that indicates how to modify the original data to obtain modified original data. Smith teaches storing the information on what modifications have been made to the document in a file (column 3, lines 21-30). Then the file is sent to the compressor where the file is then sent to the re-converter (column 3, lines 35-37). As Applicant points out, Smith then teaches the re-converter user using the file to convert the original document to the modified original document (column 4, lines 1-7). Since the document is modified using this file, it is clear that the information stored in the file indicates how to modify the original data to obtain modified original data.

2. Applicant goes on to argue that the references fail to teach creating, by using secret information, modification assuring information for detecting whether the modification information has been altered. Applicant also argues that Smith and Bisbee fails to teach or suggest both modification assuring information and original document assuring information. Smith teaches that limitation of the modification information (column 3, lines 21-30). Bisbee teaches validating each information object using a date-time stamp, a digital signature, and an authentication certificate (column 6, lines 24-26). Bisbee also teaches verifying each digital signature which includes that it has not been altered (column 12, lines 32-37). Bisbee explains that a digital signature uses a private (secret) key to perform the digital signature (column 1, lines 63-65). In combination,

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Bisbee in view of Smith teaches a modification information object that is digitally signed using a private key that proves that the object is unaltered and using that digital signature to verify that the object has not been altered.

3. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the suggestion/motivation for doing so would have been to notify associated authority of changes about to be made to a document (column 1, lines 58-61).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 2, 5 – 9, 12, 14, 15, 18 – 22, and 24 – 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed

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invention. Applicant claims using secret information to create the modification assuring information, and that information being able to detect whether the information has been altered. It is unclear where this secret information is disclosed in the specification, and detecting whether the information has been altered.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1, 2, 5 – 9, 12, 14, and 18 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bisbee, and further in view of Smith US Patent 6,918,083 B2.

Referring to claims 1, 18 and 22, Bisbee teaches:

- a. Inputting means for inputting the original data and original data assuring information (column 11, lines 43-44).
- b. Means for every time an original document is modified storing that document (column 14, lines 5-9) including its new data-assuring information (column 13, line 50).
- c. Outputting means for outputting the original data, the original data assuring information (column 6, lines 57-59) and the ability to output all the documents, including their assuring information so that the activities on them may be tracked (column 14, lines 11-12). The assuring information being signed using a private (secret) key (column 1, lines 63-65) and that signature proving that the information has not been altered (column 12, lines 32-37).

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8. Bisbee does not explicitly disclose generating modification information that indicates how to modify the original data to obtain modified original data, and storing that modification information. However, Smith discloses creating a file for storing the user markups or modifications (column 3, line 21-30). Bisbee and Smith are analogous art because they are from the same field of endeavor, digital documents. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Bisbee and Smith before him or her, to modify the document storage and verification of Bisbee to include the markup information of Smith. The suggestion/motivation for doing so would have been to notify associated authority of changes about to be made to a document (column 1, lines 58-61).

9. Referring to claims 2 and 19, Bisbee teaches determining means for determining whether the modification information is valid, then creating means creates the modification assuring information (column 13, lines 42-50). The modification information is submitted with the file through a transfer agent that attests to its validity, and then the modification assuring information is created (column 13, lines 42-50).

10. Referring to claims 5 and 21, Bisbee teaches that the modification-assuring-information and original-data-assuring information are a digital signatures (column 13, line 50).

11. Referring to claim 6, Smith teaches that the modification information includes information for identifying the original data, and the modification process performed when the original data was modified (columns 2-3, table 1, column 3, lines 31-35).

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12. Referring to claim 7, Bisbee teaches that the modification information includes the original data and difference information between the original data and modified data with respect to the original data (columns 2-3, table 1, column 3, lines 31-35).

13. Referring to claim 8, Bisbee teaches that the determination by the determining means is performed using pre-set access permission (column 16, lines 25-28). Using the public key to verify TCU's digital signature indicates pre-set access permission since only private key that associates with the public key can decrypt the TCU's digital signature.

14. Referring to claim 9, Bisbee teaches that the determining means is performed using public key of the author of the original data (column 16, lines 25-28).

15. Referring to claims 12 and 20, Bisbee teaches:

d. Inputting means for inputting the original data, original data assuring information (column 11, lines 43-44).

e. Means for every time an original document is modified storing that document (column 14, lines 5-9) including its new data-assuring information (column 13, line 50). The data assuring information being able to detect if the information has been altered (column 12, lines 32-37).

f. Original data verifying means for verifying the original data assuring information (column 16, lines 35-40). The verifying means using the secret information to verify the signature (column 1, lines 63-65) and prove that it has not been altered (column 12, lines 32-37). The same verifying means is used on every document.

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g. Only accepting a file after verifying the documents, including the content and it's digital signature (column 5, line 66-column 6, line 4).

16. Bisbee does not explicitly disclose modification information that indicates how to modify the original document and modifying means for modifying the original data in accordance with the modification information. However, Smith discloses markup information that discloses the modifications to the data (column 3, lines 21-30) and receiving the file, accepting the markups and then storing the modified file (column 3, lines 63-67).

17. Bisbee and Smith are analogous art because they are from the same field of endeavor, digital documents. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Bisbee and Smith before him or her, to modify the document verification and storage of Bisbee to include the markup information of Smith. The suggestion/motivation for doing so would have been to notify associated authority of changes about to be made to a document (column 1, lines 58-61).

18. Referring to claim 14, Bisbee teaches that the original data verifying means verifies a digital signature for the original data and the modification-information verifying means verifies a digital signature for the modification (column 16, lines 25-28).

19. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bisbee as applied to claim 1 above, and further in view of Ginter et al (US Pat No. 5982891), hereafter "Ginter".

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20. Bisbee discloses an information processing apparatus that manages the original data assuring information, the modification information, and the modification assuring information (column 13, lines 46-50) over a network (column 11, lines 26 and 44-45).

21. However Bisbee does not disclose a server that is connected with the information processing apparatus over a network wherein the server receives and manages the original-data assuring information, the modification information and the modification assuring information.

22. Ginter on the other hand discloses a server (col. 17, lines 60-63) that is connected with the information processing apparatus over a network wherein the server receives and manages the original-data assuring information, the modification information and the modification assuring information.

23. It would have been obvious to one of the ordinary skill in the art at that time of the applicant's invention was made to modify the method of Bisbee such that to incorporate a server that is connect with the information processing apparatus over a network, as taught by Ginter to provide a new kind of "virtual distribution environment" or VDE to secures, administer, and audit electronic information that travel across the information highway (col. 2, lines 22-27).

24. Claims 24 – 27 are rejected under 35 USC 103 (a) as being obvious over Bisbee in view of Smith in view of Menezes US Patent 5,473,691. Bisbee in view of Smith discloses all the limitations of the parent claim, including sending the data (Bisbee, column 6, lines 57-59 and Smith, column 3, lines 29-30). Bisbee in view of Smith does not explicitly disclose including a header with the file, the header storing modification

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information. However, Menezes discloses having an attachment header containing information on processing to be performed on the attached data (column 33, lines 14-16). Bisbee, Smith and Menezes are analogous art because they are from the same field of endeavor, data transmission. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Bisbee in view of Smith and Menezes before him or her, to modify the file of Bisbee in view of Smith to include a header containing information on processing of Menezes. The suggestion/motivation for doing so would have been so that the receiver knows what processing to perform on the data block (page 33, lines 14-16).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CORDELIA KANE whose telephone number is

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(571)272-7771. The examiner can normally be reached on Monday - Thursday 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. K./
Examiner, Art Unit 2132

/Gilberto Barron Jr/
Supervisory Patent Examiner, Art Unit 2132